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Dominion

DEPT. OF TRANSPORTATION
DOCKETS

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January 16, 2004

Dockets Facility
U.S. Department of Transportation
Research and Special Programs Administration
Room PL-401
400 Seventh Street, S.W.
Washington, D.C. 20590 – 0001

RE: Docket No. RSPA-98-4868; Notice 2 -124
Notice of Public Meeting and Request for Comments
Pipeline Safety: Gas Gathering Line Definition

In response to the above notice, which appeared in the Federal Register on November 5, 2003, Dominion Delivery makes the attached comments, and acknowledges with due respect, the opportunity to provide our input.

Respectfully,

E. S. Hall

Eric S. Hall

2004 JAN 20 A 9:04

**COMMENTS OF DOMINION DELIVERY
TO THE NOTICE OF PUBLIC MEETING AND REQUEST FOR COMMENTS
DOCKET NO. RSPA-98-4868, NOTICE 2
DEPARTMENT OF TRANSPORTATION
OFFICE OF PIPELINE SAFETY
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
CONCERNING: GAS GATHERING LINE DEFINITION**

INTRODUCTION

On a Wednesday November 5, 2003, notice was given of Request for Comments in Docket No. RSPA-98-4868, Notice 2 in the Federal Register (49 CFR, Parts 192 and 195, F.R. Vol. 68, No. 214, pp. 62555). The Research and Special Programs Administration (RSPA) has requested comments on the definition of Gas Gathering Lines. These comments to the Notice of Proposed Rulemaking are submitted by Dominion Delivery.

The comments contained in this document are on behalf of Dominion Delivery, referred to in this document as Dominion, which consists of the following companies - Dominion East Ohio, Dominion Peoples, and Dominion Hope.

Dominion is one of the nation's largest producers of energy, with a diversified and integrated energy portfolio consisting of 24,000-megawatts of generation, 5.7 trillion cubic feet equivalent of natural gas reserves, 7,700 miles of natural gas transmission pipeline and more than 960 billion cubic feet of storage capacity. Dominion has nearly 17,000 employees and serves 3.8 million franchise natural gas and electric customers in five states.

SUMMARY

Dominion is pleased to have the opportunity to comment on the proposed regulations. Our goal is to provide safe and reliable service to our customers in the most cost effective way and assume that the Department of Transportation's is the same. Based upon that premise, we believe the following comments to the Request for Comments will bring the regulations more in line with Dominion's and DOT's goals.

COMMENTS

RSPA has indicated in the November 5, 2003 Federal Register that they are seeking comments regarding the Gathering Line Definition on various issues. Dominion will try to comment on all appropriate issues within this document.

RSPA has said in the past that it believes that ambiguity in the federal pipeline safety regulations 49 CFR Part 192, regarding the definition of gathering lines has resulted in a problem of disagreement on gathering line classifications in various states. In Ohio, Pennsylvania and West Virginia, the Dominion operating service territories have not experienced any difficulty with the OPS or state inspectors regarding gathering line classifications.

Although the regulations exempt rural gathering lines, 49 CFR Part 192 does require gathering lines situated within the limits of cities, towns and villages or any designated residential or commercial areas to meet the same safety criteria as transmission lines in 49 CFR Part 192. Any problem with disagreements over classifications, therefore only really apply to rural areas which by definition are remote of people and dwellings.

From a public safety perspective, the Dominion Delivery Companies do not believe that a more prescriptive definition of a gathering line is warranted. In addition, due to a lack of classification problems, there is no evidence of any of any operating problems with the existing definition. A new definition will only prompt the administrative burden of analysis of existing systems and the re-classification of certain pipelines. In turn, significant dollars may need to be spent to bring pipelines into compliance without any direct safety benefits.

Dominion feels that any change to the gathering line definition that has a cost impact on gas operators must be justified with a cost-benefit analysis. RSPA must make a reasonable determination that all benefits to public safety and the environment justify the costs and develop the most cost effective alternative.

Issue 1: The point where gas production ends and gas gathering begins.

Issue 2: The point where gas gathering ends and gas transmission or distribution begins.

Dominion would like to offer the following revised definition of Gathering Lines that would address the two issues above.

“Gathering line” means any pipeline or part of a connected series of pipelines used to transport gas from a production source – gas wells, gas well separators, oil well separators, flow lines, and dehydrators. The end of the gathering line shall be the most downstream location of the following:

- (1) The inlet of a gas processing plant.
- (2) Excluding well head compressors, either the outlet of the most downstream compressor station installed to facilitate gathering in an onshore production field,

- or the outlet or the first onshore compressor station downstream of an offshore gathering line.
- (3) The outlet of the furthestmost downstream: dehydration equipment, treating equipment, scrubber station, that makes the gas of suitable quality for residential consumption.
 - (4) If (1), (2) or (3) do not exist, then the inlet to a storage facility, a transmission line, or a distribution line transporting gas of suitable quality for residential consumption.

Dominion believes that these minor modifications made to the Gathering Line definition would take into consideration the special nature of the Appalachian production fields, and minimize the impact of the definition.

The revised definition first takes into consideration the presence of natural gas liquids products extraction plants. Where an extraction plant is present, the gathering classification extends from a production facility to the inlet of the plant. This criteria extends the gathering function downstream to a point at which the gas is suitable for consumption, regardless of the number of gas processing plants required.

Secondly, where no extraction plants are present, the gathering classification would end at the outlet of compressors installed with the specific intent to facilitate gathering and are located in or adjacent to a production field. This criteria is one that corresponds to the concept of a central location in the production field where gathering would end and transmission begins. On occasion, gas produced from a single well may pass through several compressor stations due to adjacent production fields being operated at different pressures. However, gas production should be connected to the upstream pipeline system of each subject compressor station.

The third criteria accounts for gas conditioning equipment which may not be located at a gas processing plant or compressor station. However, the conditioning is necessary in order to make the gas suitable for consumption. This would be consistent with the installation of equipment installed upstream of distribution mains and services coming off gathering lines.

Fourth, the last criteria was modified to include the situation where a gathering line may be connected to a distribution pipeline without any need for gas conditioning. This is a rather common arrangement in the Appalachian area where gas is often produced at residential consumption quality and where production fields are located adjacent to residential areas.

As an additional note, Dominion believes that with the magnitude of gathering lines that could be affected by a definition change, a provision for waiver of Section 192.14 "Conversion to service subject to this part" requirements, would be appropriate. This situation is similar to the first application of the Act to older lines which were brought under the jurisdiction of the Act at its inception. A waiver similar to the wording found in Section 192.619(4)(c) would be necessary to accommodate the gathering lines reclassification due to a new definition.

Issue 3: In defining “regulated gathering lines,” should OPS consider population density.

Considering population density is nothing new for Dominion. Dominion has used class location studies in their pipeline system to meet the design, operating and maintenance requirements of DOT Part 192. In the most recent OPS Final Rule “Pipeline Integrity Management in High Consequence Areas for Gas Transmission Pipelines,” all transmission pipeline operators are required to define High Consequence Areas (HCA). These HCA’s include not only higher population areas already identified by pipeline operators through the longstanding Class Location definitions outlined in DOT code Section 192.5, but also “identified sites” which are intended to pick up additional places where people are located. In order to be consistent with the Pipeline Integrity Management rule, Dominion recommends that OPS allow the use of either a Heat Affected Zone (HAZ) calculation or the Class Location identification to determine the portions of pipelines within High Consequence Areas. Dominion supports a bifurcated approach which is listed below.

The use of a Heat Affected Zone (HAZ) calculation, better known as the C-FER calculation, with 20 or more dwellings, and the inclusion of “Identified Sites” would ensure that OPS’ intent to provide additional safety for structures with “difficult to evacuate persons”, “20 or more houses”, or “gathering areas” is obtained while reducing the environmental impacts and ensuring that the costs of additional requirements are focused on the areas of highest consequence. Utilizing the C-FER calculation could eliminate the need for inspections of pipelines in environmentally sensitive Class 3 & 4 areas. These areas include rivers or washes, wildlife sanctuaries, etc. that are Class 3 or 4 because of their proximity to residential areas but whose HAZ would impact few if any structures and no “identified structures”. The pipeline itself may provide no environmental threat to the area, but the impact of persons walking through the areas to perform testing and a required inspections could be an environmental impact.

Dominion recommends the following language taken from the most recent Department of Transportation “Pipeline Integrity Management in High Consequence Areas for Gas Transmission Pipelines,” Final Rule registered December 15, 2003.

High consequence area (HCA) is an area in the vicinity of a transmission pipeline segment determined by the operator through the application of either (1) or (2) below:

- (1) An area defined as
 - (i) a Class 3 location as defined in 192.5; or
 - (ii) a Class 4 location as defined in 192.5; or
 - (iii) Any area outside a Class 3 or 4 location where the potential impact radius is greater than 660ft, and the area within a potential impact circle contains 20 or more buildings intended for human occupancy; or
 - (iv) the area within a Potential Impact Circle containing an identified site.
- (2) The area within a Potential Impact Circle which contains
 - (i) 20 or more buildings intended for human occupancy, unless the exception in par.(d) applies; or
 - (ii) an identified site.

- (3) Where a potential impact circle is calculated under either method (1) or (2) to establish an HCA, the length of the HCA extends axially along the length of the pipeline from the outermost edge of the first potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy to the outermost edge of the last contiguous potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy.
- (4) If in identifying an HCA under paragraph (1)(iii) of this definition or paragraph (2)(i) of this definition, the radius of the potential impact circle is greater than 660 ft, the operator may identify an HCA based on a prorated number of buildings intended for human occupancy within a distance of 660 ft from the centerline of the pipeline. If an operator chooses this approach, the operator must prorate the number of buildings intended for human occupancy based on the ratio of an area with a radius of 660 ft to the area of the potential impact circle. (i.e. the prorated number of buildings intended for human occupancy is equal to $[20 \times (660 / \text{Potential Impact Circle radius})^2]$).

Identified Site means each of the following areas:

- (a) A building occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12 month period. (the days and weeks need not be consecutive), or
- (b) An outside area or open structure that is occupied by 20 or more persons at least 50 days in any 12 month period. (the days and weeks need not be consecutive), or
- (c) A facility occupied by persons who are confined, are of impaired mobility, or would be difficult to evacuate.

Potential Impact Circle is a circle of radius equal to the potential impact radius (PIR).

Potential Impact Radius (PIR) means the radius of a circle within which the potential failure of a pipeline could have significant impact on people or property. PIR is determined by the formula " $r = 0.69 \times (\text{square root of } (p \times d^2))$ ", where "r" is the radius in feet of a circular area surrounding the point of failure, "p" is the maximum allowable operating pressure in the pipeline segment (psig) and "d" is the nominal diameter of the pipeline (inches).

[Note: 0.69 is the factor for natural gas. This number will vary for other gases depending upon their heat of combustion. An operator transporting gas other than natural gas must use Section 3.2 of ASME/ANSI B31.8S to calculate the impact radius formula.]

Dominion realizes that the use of the Heat Affected Zone calculation is not always practical for smaller companies operating predominantly in Class 3 and 4 locations. Therefore the use of the definition (1) above would offer pipeline companies the option of utilizing their present class location information to identify HCA's. If a company does not have a sophisticated GIS system or prefers to utilize their existing class information, they would have the option available to them.

Issue 5: What safety regulations would you recommend for rural gas gathering lines, and what lines would apply.

Dominion feels that the current regulations go far enough to provide for public safety in highly populated areas. In the current regulations 49 CFR Part 192 does require gathering lines situated within the limits of cities, towns and villages or any designated residential or commercial areas to meet the same safety criteria as transmission lines in 49 CFR Part 192. Any problem with disagreements over classifications, therefore only really apply to rural areas which by definition are remote of people and dwellings. In these areas if one would apply the bifurcated approach mentioned above in Issue 3, and the operator still found affected pipelines, they could apply the same 49 CFR Part 192 requirements for transmission pipelines.

Issue 7: Whether Safety regulations for gas rural gathering lines operating at low stress should be less stringent than for other rural gathering lines.

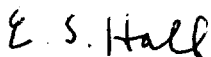
There is substantial information currently on record in the "Pipeline Integrity Management in High Consequence Areas for Gas Transmission Pipelines," Docket that explains that low stress pipelines fail in a different manner than pipelines that operate above 30% SMYS. The probability of rupture decreases with a decrease in the hoop stress below 30% SMYS. Where pipelines see hoop stresses below 30% SMYS, a pipeline is more likely to leak than rupture. Therefore, Dominion feels that low stress pipelines should require less stringent regulations than high stress pipelines.

CONCLUSION

Dominion appreciates being given the opportunity to provide comments. We oppose any revision to the current Gas Gathering Line definition in that it would be unduly burdensome. If there are definition problems with gathering lines we have not experienced them. Furthermore, the relatively low pressures often found in the Dominion Company gathering lines, limit the potential for severity of damage on property stemming from leaks and the rural, isolated nature of the lines in and of itself directly relates to the lack of impact on people and dwellings.

In the event the RSPA can justify benefits from revising the regulations, Dominion believes that modification of the current regulation as set out in these comments will mitigate the cost and burden and perhaps enhance the clarity of the definition of gathering lines.

Respectfully,



Eric S. Hall
Director Storage and Gathering